53 Powerful Ideas All Teachers Should Know About

Graham Gibbs

SEDA
STAFF AND EDUCATIONAL DEVELOPMENT ASSOCIATION

Idea Number 32, April 2015

Students don't always learn from experience

Item 31 discussed the general cyclical process that all learners need to go through if they are to make the most of their experience, and learn from it. This item is about differences between learners in how they learn from experience (or do not learn).

Perhaps the best way for me to explain what I am on about here is to tell an anecdote. Thirty years ago I was spending a sabbatical at the University of Goteborg with Ferenc Marton and his many colleagues, and learning about deep and surface approaches to learning. He asked me to give a seminar for them all that was about learning, but from a very different perspective. I chose experiential learning theory, and experiential learning styles, as my topic, but did not tell them what I was actually going to do or what it was about. I also chose to make the seminar an experiential workshop – so they would learn by experience, not just by listening or discussing.

First I took the Experiential Learning Styles Inventory, a questionnaire developed by David Kolb, and asked everyone to complete the inventory. I then scored it and divided everyone into four groups on the basis of their scores. One group was identified by the inventory as having a fairly extreme emphasis on 'Abstract Conceptions' in their learning style, tending to pay attention to theory rather than planning, doing or reflection. A second group I formed out of those where their inventory scores suggested a strong emphasis on doing and reflecting, with very little emphasis on abstract thinking or planning. A third group had scores indicating a preference for planning rather than reflection or thinking. The fourth group I formed consisted of everyone else, who had more balanced styles with no strong preferences, and told them they would be observers, watching the other three groups tackle a task, and trying to spot if they had a distinctive way of going about it.

I then set the three groups with extreme but distinctive styles the same task. They were told they were a working group set up by Senate to tackle the problem of the theft of bicycles on campus. They would have an hour and they would be observed by some of the others as they worked.

The observers noticed huge, and amusing, differences between the three groups. The 'Abstract Conceptualiser' group (led by Ferenc Marton) were still discussing the ethics of ownership when the time ran out. The planners were on Bicycle Theft Rule 17 paragraph 3 subsection 2a and were correcting the spelling. Kolb has said that an extreme style of the kind this group displayed were often characterised by 'outstanding accomplishment of the wrong thing' because they did not reflect or notice that their effort

was misplaced. The group whose style emphasised doing and reflection had brainstormed 49 possible ways to solve the theft problem but had not considered which one was best or how to implement them and had instead knocked off for a cup of coffee. Ferenc never forgave me.

Of course they all protested that they were perfectly capable of planning, and doing, and reflecting, and thinking, but had not done so on this occasion. And they were probably right. But they clearly had a fairly strong preference for emphasising one aspect of the experiential learning cycle at the expense of the others. When a group of your students tackle a task you have set them it is quite likely that some of them will tackle it quite differently to others, because of stylistic preferences or habits, and as a consequence they may achieve less and learn less than they might have done if they were more balanced, and moved round the experiential learning cycle instead of being stuck at one point on it.

For example my manual 'Learning by Doing' recounts a story of some computing students who were set a programming problem. Some of the students produced a complete programme that solved a problem other than the one that was set – but without noticing this. Some read a great deal about programming in general and about the kind of problem it was but failed to get as far as actually writing any code in the time available. Others produced lots of short segments of code, none of which worked, and so on. These can be recognised as unbalanced or extreme experiential learning styles. The students then completed the experiential learning styles inventory, scored it, and discussed their own style and preferences, and in particular what components of the learning cycle were missing from their previous attempt to tackle the programming problem. Then they were set another problem, but this time advised to approach it with a more balanced style – using theory where it was useful, applying theory to deciding how to tackle it, actually writing enough code, and noticing when the code worked and when it did not, and so on. They performed much better, with much less variation between students in how they tackled it. This demonstrates that such styles are often simply habits or preferences and that it is possible to learn to be more balanced and more flexible. What changed with these students was their 'meta cognitive awareness and control'. They were more aware of what they were doing and were making deliberate decisions about how to go about things so that they were more likely to be successful.

You cannot assume that all students will learn effectively from experience, even if you have planned that they learnt by doing, but you can make it more likely that they learn.

Suggested reading

Gibbs, G. (1988) Learning by Doing: a guide to teaching and learning methods See the section on learning styles: http://www2.glos.ac.uk/gdn/gibbs/ch3.htm

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